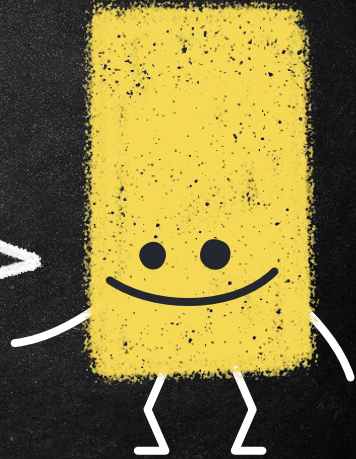


micro:bit XXL

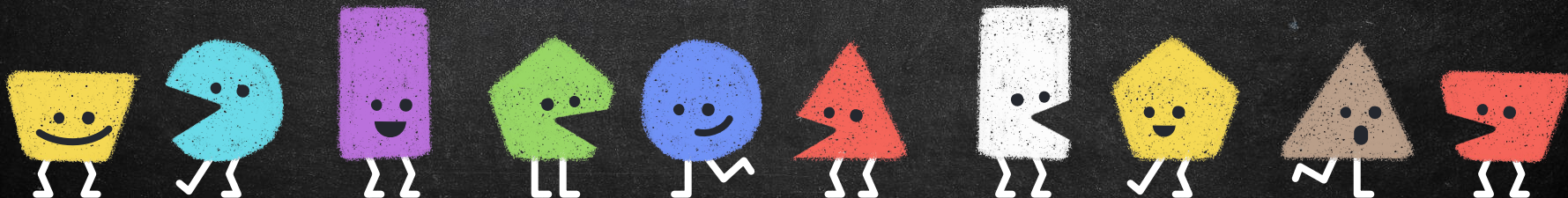
i&i vakvereniging
informatica &
digitale geletterdheid

Pauline Maas





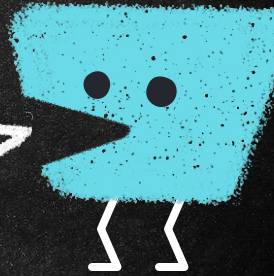
The Invent to Learn Guide to the micro:bit



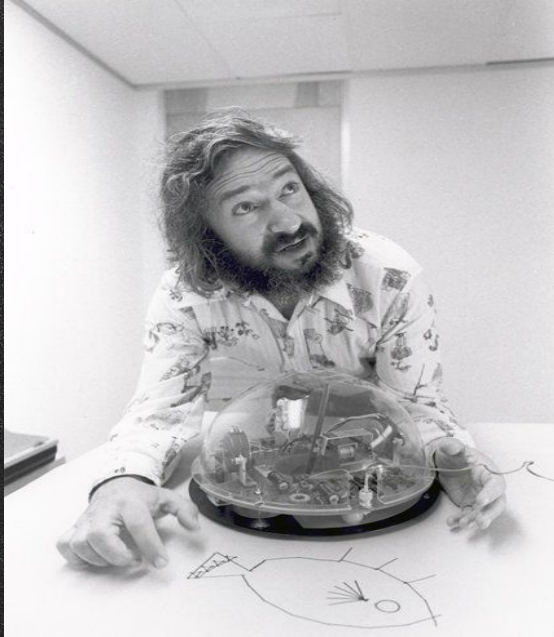
Jeanette Wing - 2006



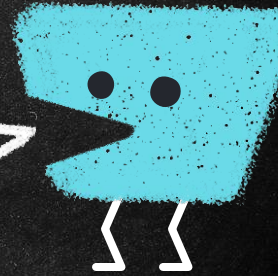
Computational thinking solving a problem in such a way that a computer can carry it out.



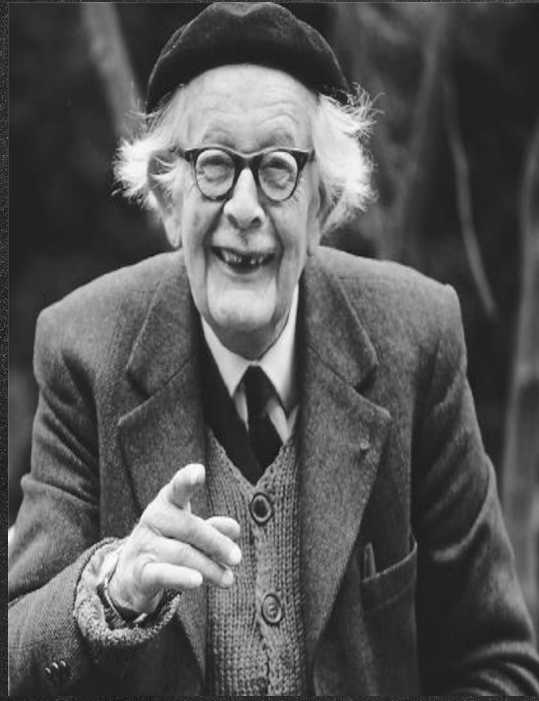
Seymour Papert - 1960



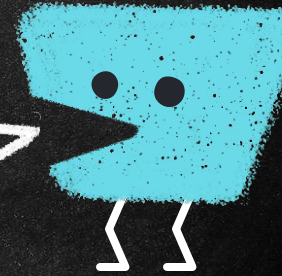
Children learn best when construct something that has a personal meaning to them – a poem, a robot, a sandcastle or a computer program.



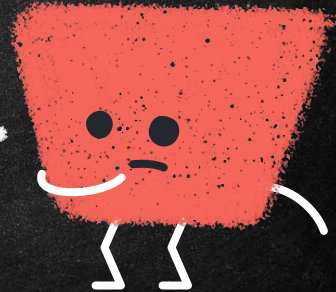
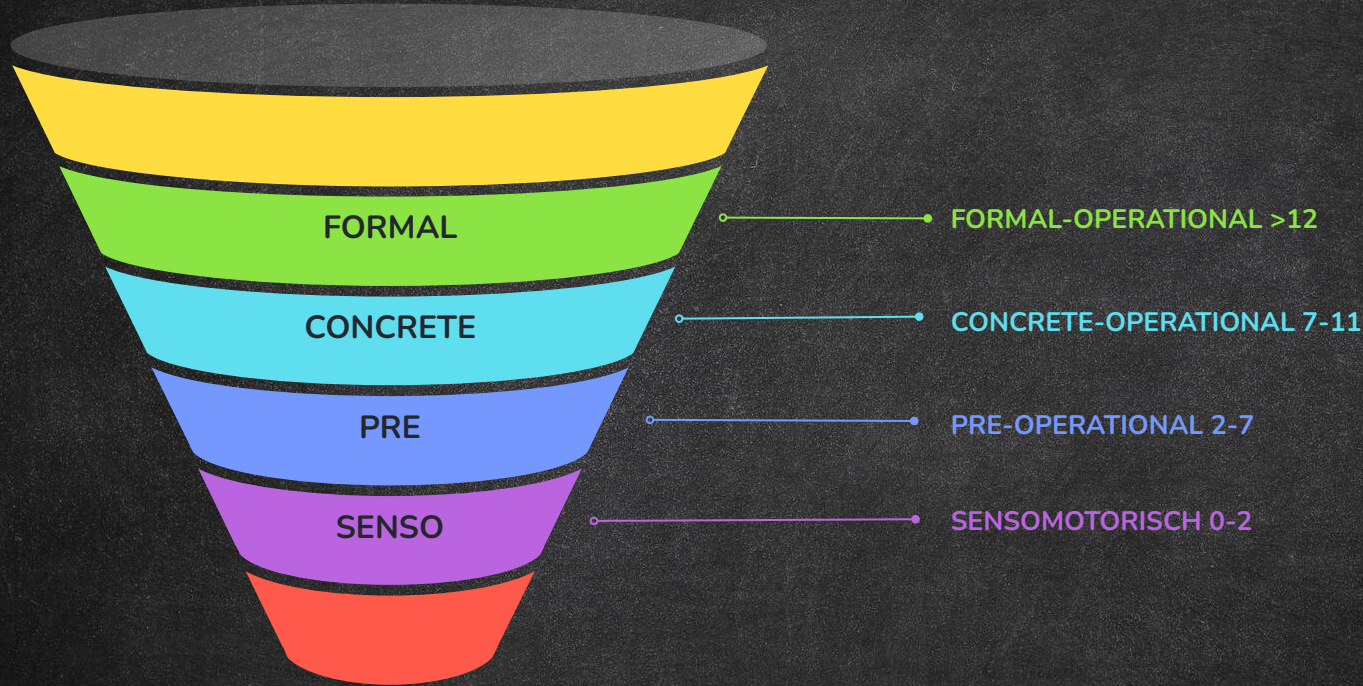
Jean Piaget - 1973



Children have real understanding only of that, what they invent themselves.

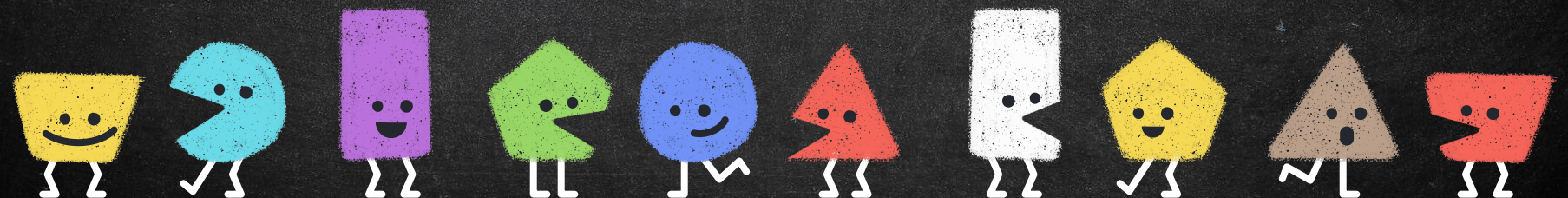


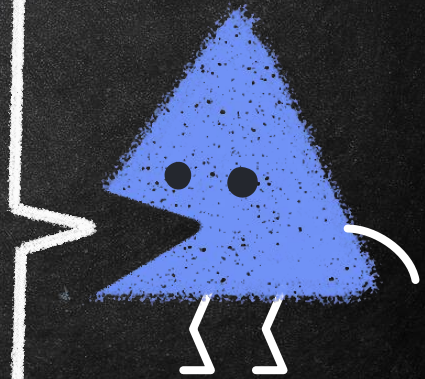
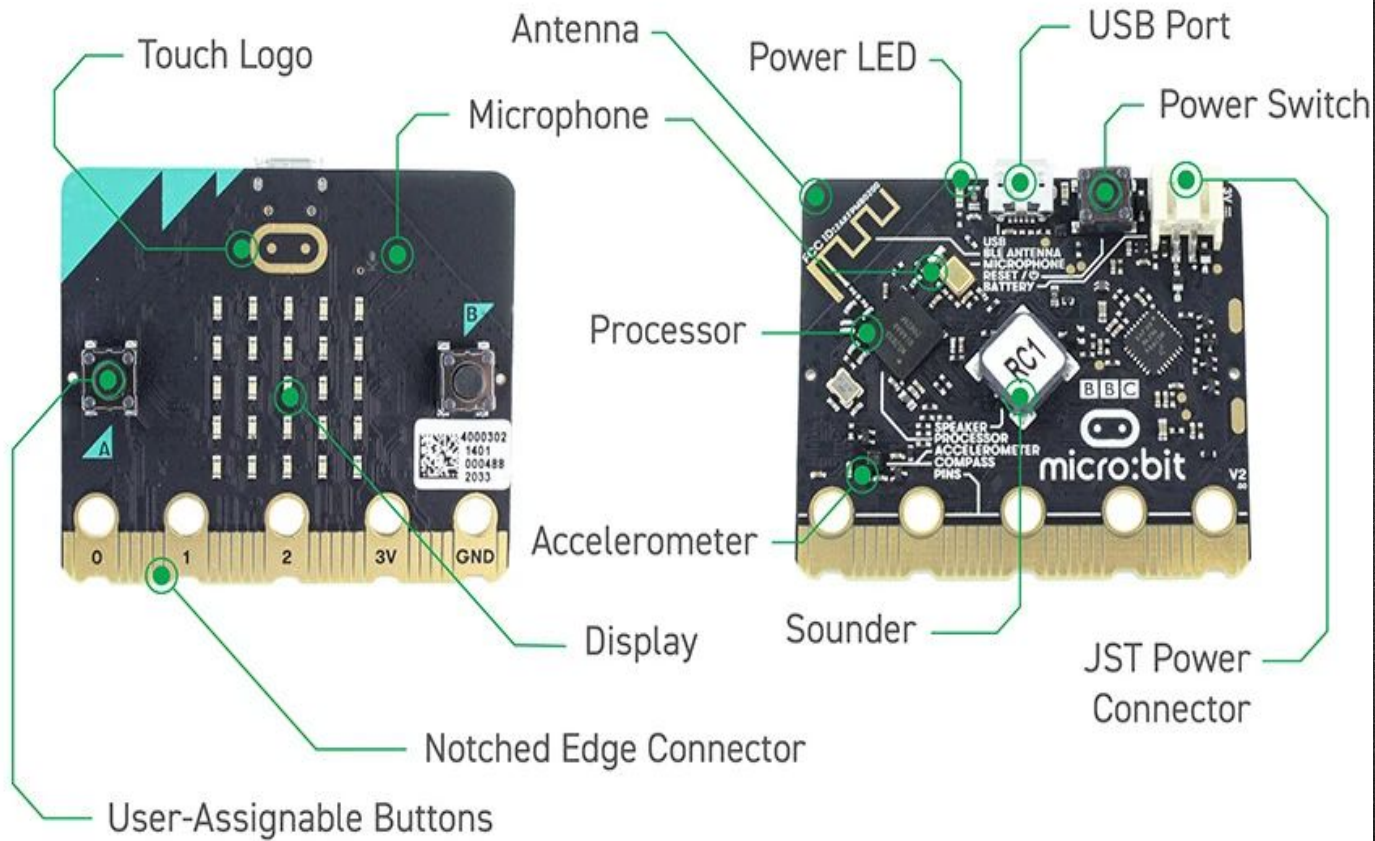
PIAGET STAGES COGNITIVE DEVELOPMENT





10
projecten



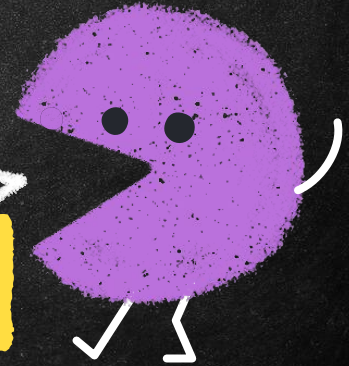


micro:bit

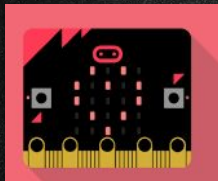
- 2015
- 2017
- 2022



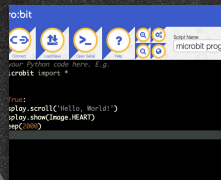
5.3 MILJOEN



MakeCode



Python micro:bit



mobile APP



Tinkercad



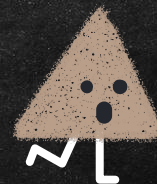
Scratch

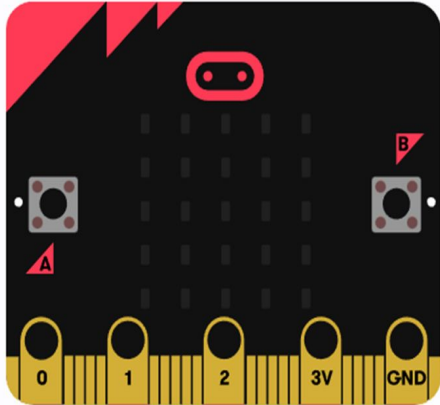


Windows APP



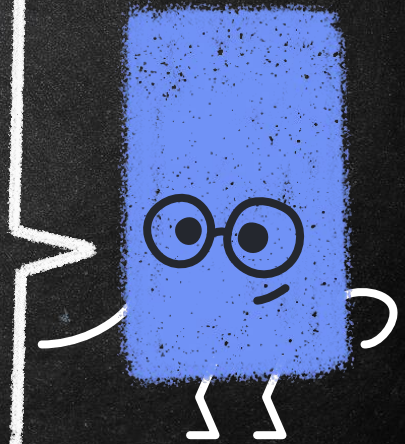
microBlocks

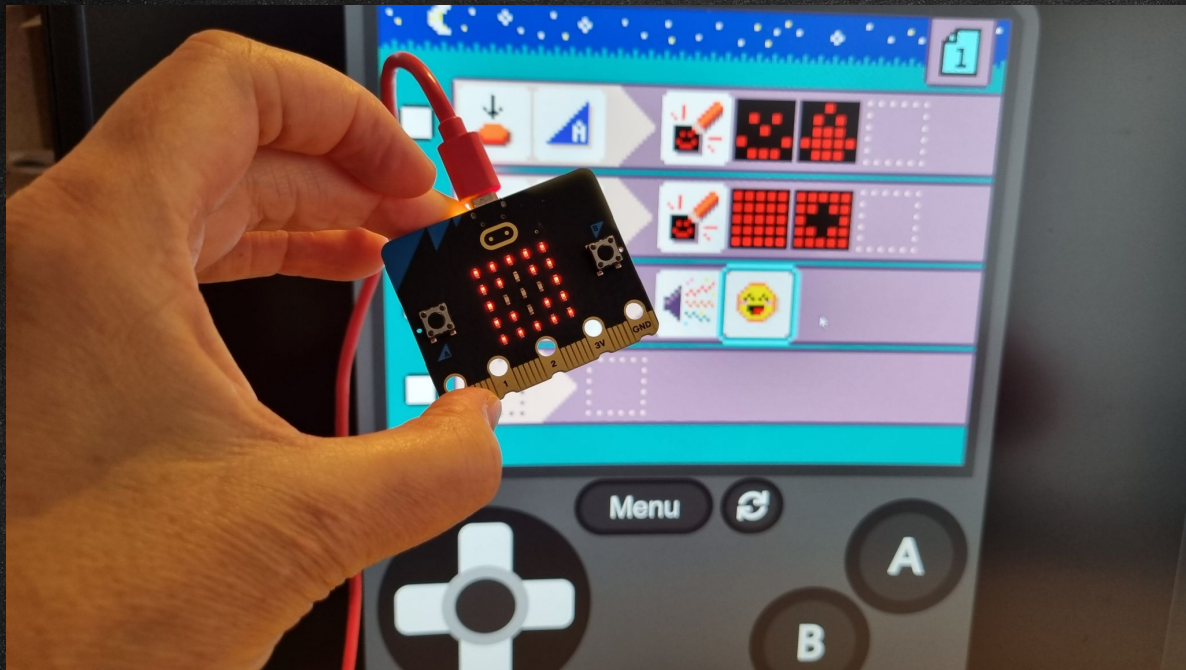




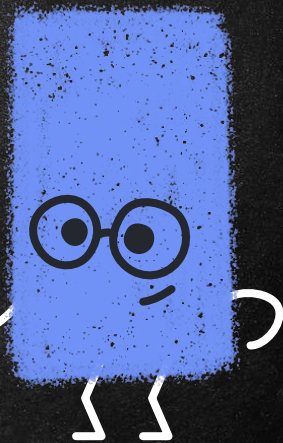
Zoeken...

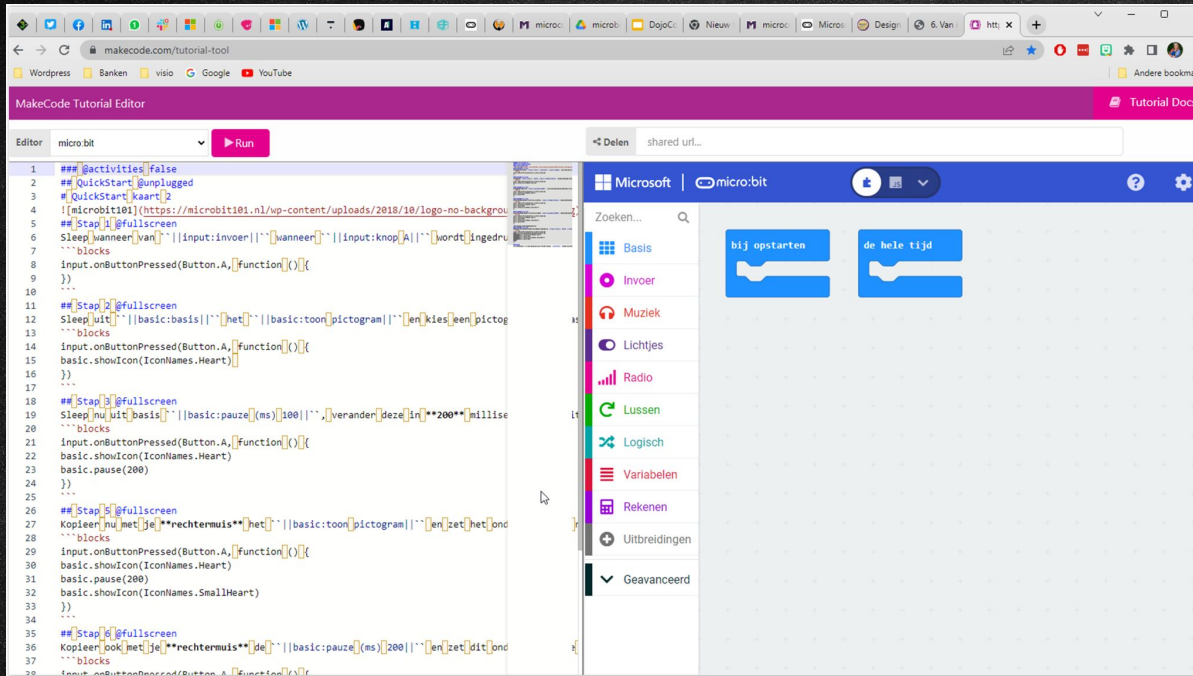
- Basis
- Invoer
- Muziek
- Lichtjes
- Radio
- Lussen
- Logisch
- Variabelen
- Rekenen
- Uitbreidingen
- Geavanceerd





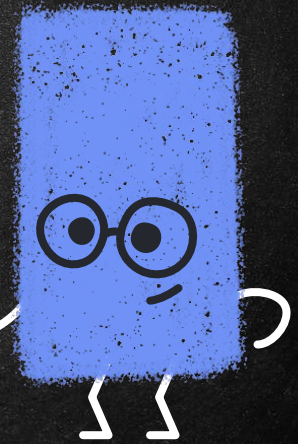
aka.ms/m9





The screenshot displays the MakeCode Tutorial Editor interface. The top bar is purple and contains the text "MakeCode Tutorial Editor" and "Tutorial Docs". Below this, there's a toolbar with a "Run" button. The main area is split into two panes. The left pane is a code editor showing JavaScript code for a micro:bit project. The code includes comments and function calls like `basic.showIcon` and `basic.pause`. The right pane is a preview window showing a simulated micro:bit interface. It has a search bar at the top and a list of categories on the left: Basis, Invoer, Muziek, Lichtjes, Radio, Lussen, Logisch, Variabelen, Rekenen, Uitbreidingen, and Geavanceerd. The main area of the preview window shows two blue buttons: "bij opstarten" and "de hele tijd".

<https://makecode.com/tutorial-tool>



micro:bit Start Delen

Blokken JavaScript Microsoft

Zoeken...

Basis Invoer Muziek Lichtjes Radio Lussen Logisch Variabelen Rekenen

Geavanceerd Functies Matrices Tekst Spel Plaatjes Pinnen Serieel Besturen Uitbreidingen

bij opstarten de hele tijd

toon pictogram

wanneer knop A wordt ingedrukt

play melody at tempo 120 (bpm)

wanneer knop B wordt ingedrukt

doe

4 keer herhalen

schrijf digitaal pin P1 naar 1


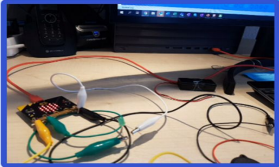
pauzeer (ms) 100

schrijf digitaal pin P1 naar 0

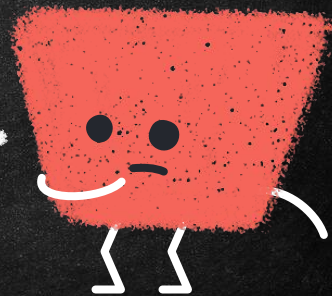
pauzeer (ms) 100

Downloaden

webinar



makecode.com/streamer



Student code

See each of your students' code live, send code to another student and download a report with all the students' code

Download report for all students as Word document

Your students

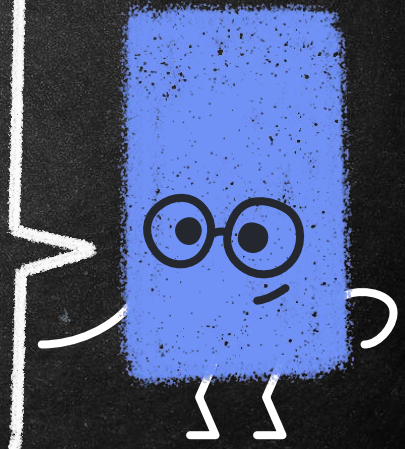
Select a student and review their code on the right hand panel

- Ada L. In progress
- Alan T. In progress
- Charles B. In progress
- Grace H.** Finished
- Katherine J. In progress

Grace H. Share code with students

```
forever loop  
  show icon  
  pause (ms) 100  
  show icon  
  pause (ms) 100
```

classroom.microbit.org



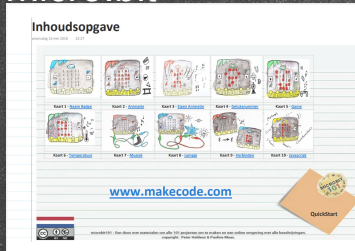


Leerling Doosjes



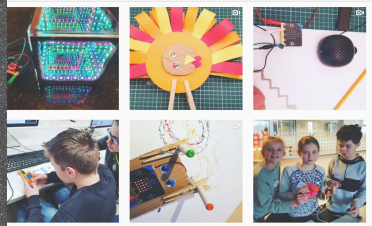
2 lessen

Quickstart kaarten met 10 kleine opdrachten waarin ze de basis leren van werken met de micro:bit



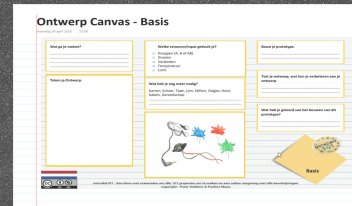
3 lessen

Kies 5 projecten van microbit101.nl en laat ze in groepen hier aan werken. Ze laten steeds zien wat ze hebben gemaakt.



5 lessen

In groepen werken ze aan met het ontwerp canvas om iets te maken. Dit presenteren ze en geven aan wat anders/beter



Hoe in de klas - 10 lessen



Ontwerp Canvas - Expert

donderdag 10 februari 2022 22:06

Wat ga je maken?

.....
.....
.....

Wat heb je nog meer nodig?

Karton, Schaar, Tape, Lijm, Stiften, Oogjes, Hout,
Kabels, Gereedschap.
.....

Test je ontwerp, wat kun je verbeteren aan je ontwerp.

.....
.....

Teken je Ontwerp.

Welke programmeer taal?

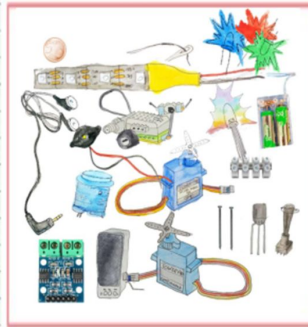
- | | |
|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> MakeCode | <input type="checkbox"/> Python |
| <input type="checkbox"/> Scratch | <input type="checkbox"/> Tinkercad |
| <input type="checkbox"/> Micro:Python | <input type="checkbox"/> Micro Blocks |
| <input type="checkbox"/> JavaScript | <input type="checkbox"/> |

Bouw je prototype.

.....
.....

Welke sensoren/input gebruik je?

- | | |
|---|-------------------------------------|
| <input type="checkbox"/> Knoppen (A, B of AB) | <input type="checkbox"/> Sound (V2) |
| <input type="checkbox"/> Shake | <input type="checkbox"/> Touch (V2) |
| <input type="checkbox"/> Temperatuur | <input type="checkbox"/> Verbinden |
| <input type="checkbox"/> Licht | <input type="checkbox"/> |
| <input type="checkbox"/> | |



Wat heb je geleerd van het bouwen van dit prototype?

.....
.....

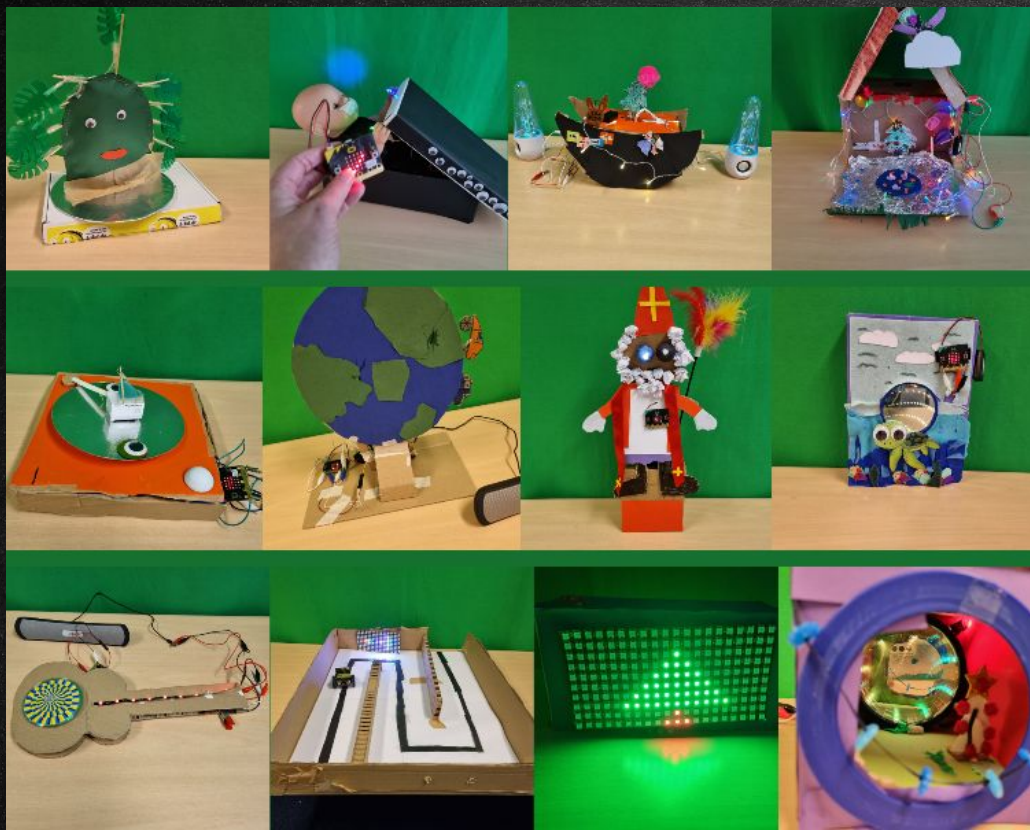
Expert



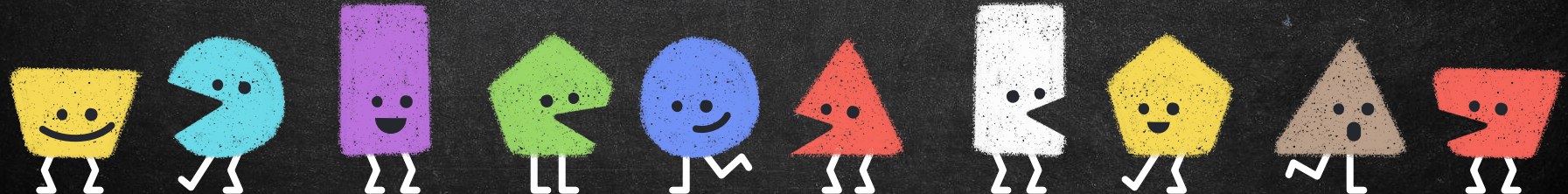
microbit101 : Een doos met materialen om alle 101 projecten om te maken en een online omgeving met alle beschrijvingen.
copyright: Peter Heldens & Pauline Maas.

Ontwerp Canvas 3 levels


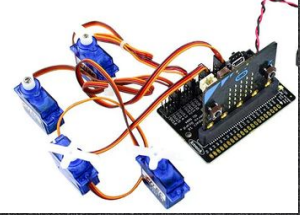
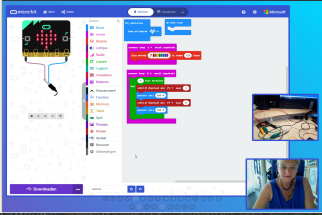




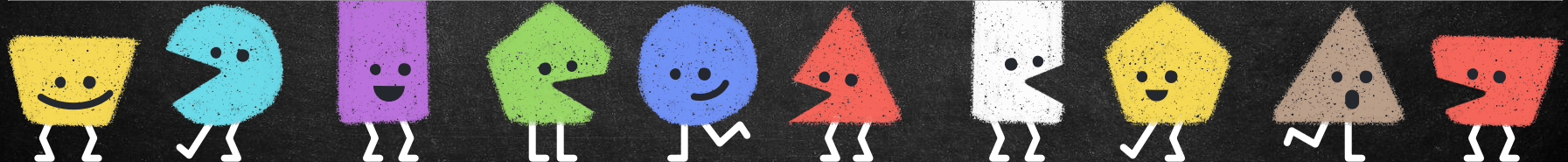


PO-project Ontwerpcanvas

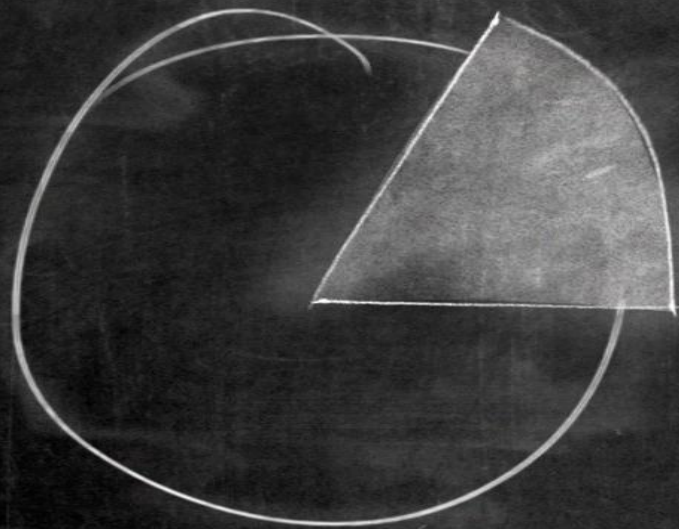


Wat nu? Kijk microbit101.nl

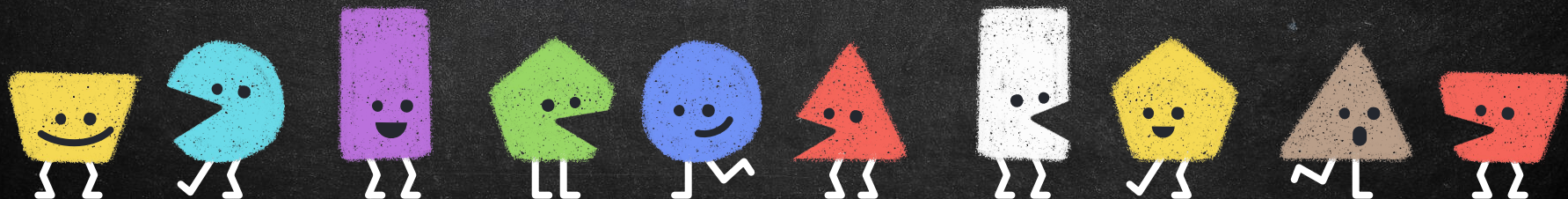
| BASIS KAARTEN | Servo Boards | Streaming & Classroom | LED (MATRIX) | XXXL |
|---|---|---|---|---|
|  |  |  |  |  |
| <ul style="list-style-type: none">• Basis quickstart cards• Maak een led-bloem• Hack iets | <ul style="list-style-type: none">• Verschillende soorten• Wat kan wel en niet | <ul style="list-style-type: none">• https://makecode.com/streamer#• https://classroom.microbit.org/ | <ul style="list-style-type: none">• programmeer een matrix• Hoe maak je een pixel tekening op een matrix | <ul style="list-style-type: none">• Mp3 speler• Nfc chip• Bellen blaas• Eigen tutorial |



THE RULE OF 80/20

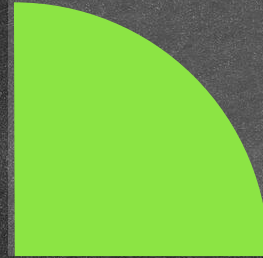
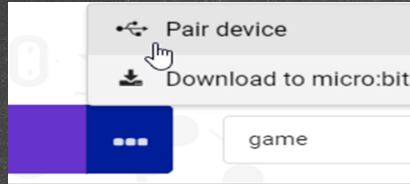


20%
FOCUS HERE!

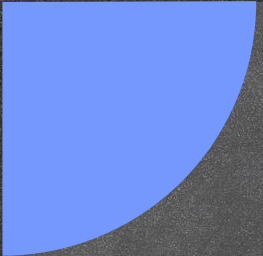
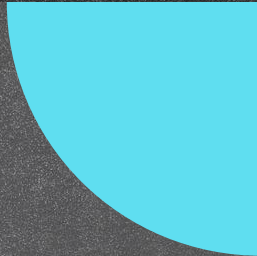
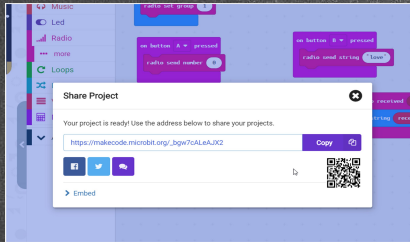
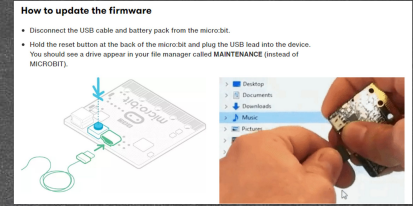


4 tips

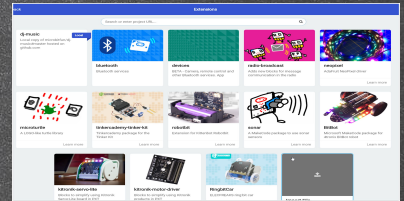
PAIR & DOWNLOAD



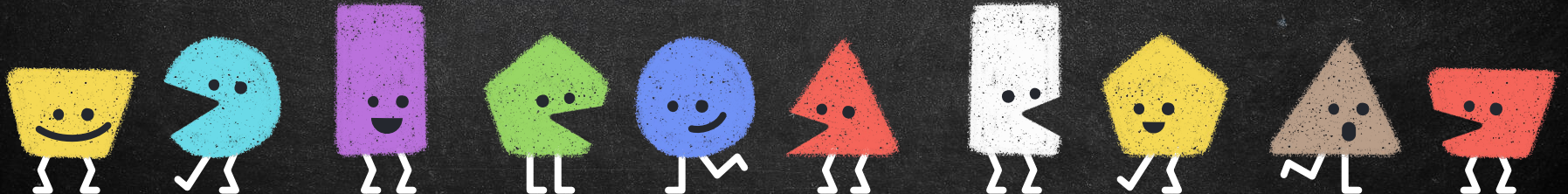
FIRMWARE



SAVE & SHARE

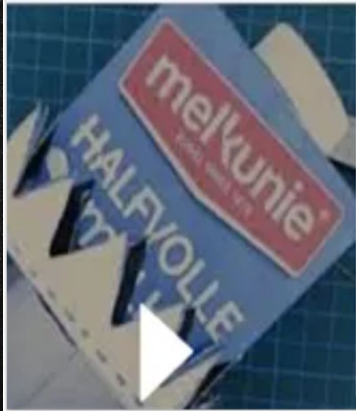


EXTENSIONS





onster - Ma



We hebben al verschillend lesmateriaal online gezet. Al het lesmateriaal staat in OneNote's.

[Je kunt al het lesmateriaal landscape printen.](#)

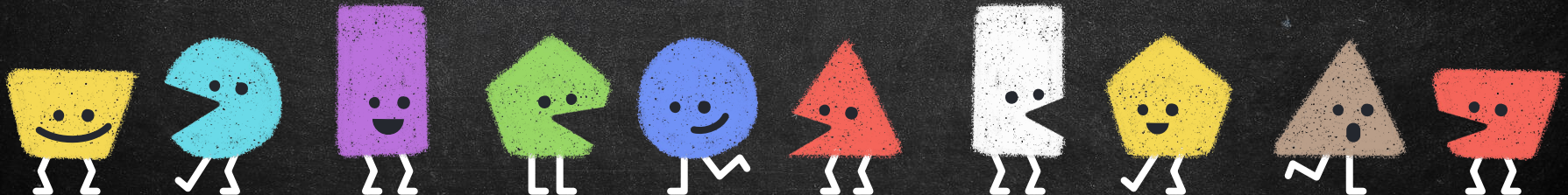
De microbit101 met de 10 hoofdstukken en al het materiaal om de 101 projecten te maken, de Quickstart kaarten in het NL, EN, FR (en binnenkort ook in het Grieks, Spaans en Portugees), de microbit fiesta lessen en de Kerstlessen

- [De microbit101 OneNote](#)
- [De Symbaloo met links naar alle 101 projecten](#)
- [De QuickStart kaarten](#)
- [De Ontwerp Canvassen](#)
- [Unplugged micro:bit](#)
- [De MicrobitFiësta lessen OneNote](#)
- [De kerstlessen van 2017 PDF](#)



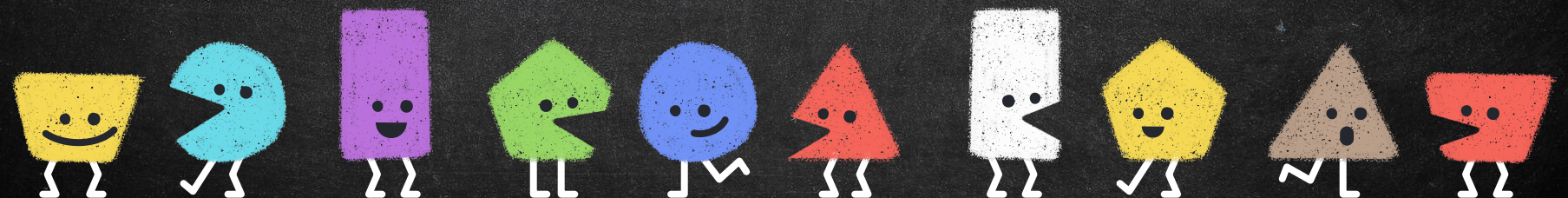


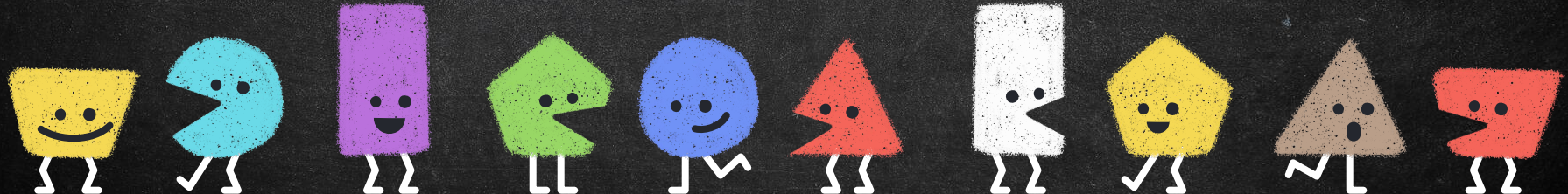
LED lampjes





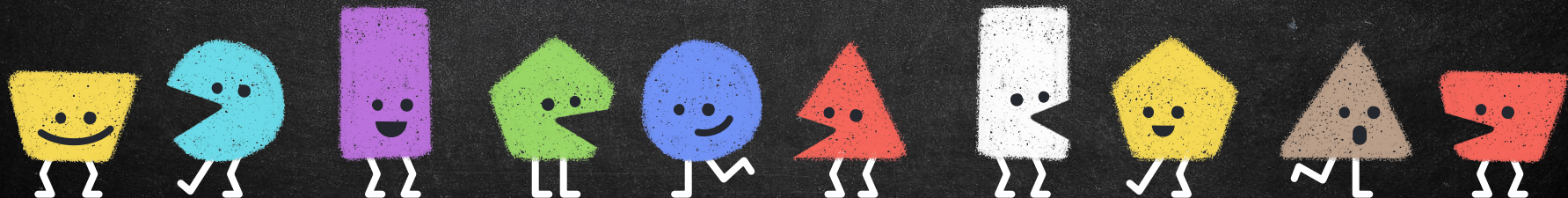
#doyourbit
challenge





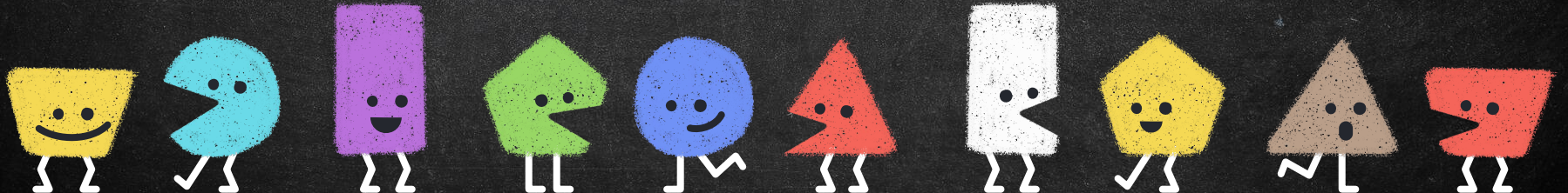


PO-project Milky Monsters





#coding lights



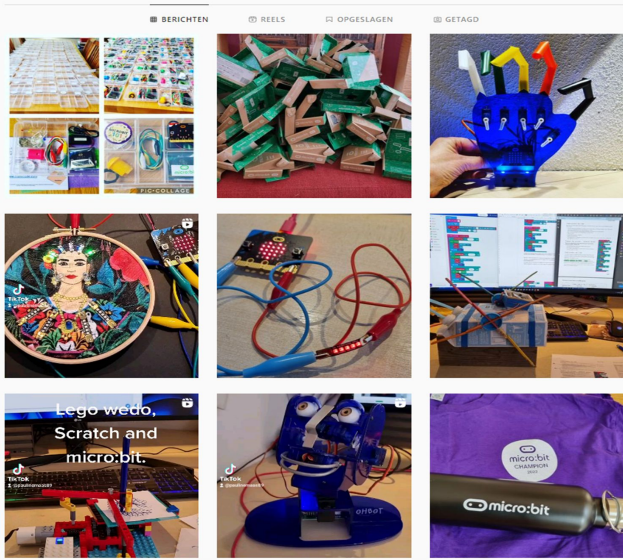


microbit101

Profiel bewerken

207 berichten 470 volgers 140 volgend

Pauline Maas
Sinds 2018 is er een basis met 101 projecten die je online kunt namaken. Maandelijks komen er nieuwe projecten bij om na te maken.
lnk.bio/microbit101



<https://www.instagram.com/microbit101/>

Insta @microbit101
www.microbit101.nl
Twitter @4pip

